THE DEPUTY PRIME MINISTER AND THE MINISTER OF AGRICU-TURE (SHRI DEVI LAL); (a) No, Sir.

(b) Effective control of whitefly has been achieved in some South American Countries like Colombia, Brazil and Venezuela by integrated Pest Management techniques, which (comprise of cultural, mechanical, biological control methods and only need-based application of pesticides. Integrated Pest Management is the main thrust of plant protection strategy in India.

Pests resistant to pesticides

2202. SHRI SHAMIM HASHMI: Will the Minister of AGRICULTURE be pleased to state whether several pests have developed resistance to pesticides used in the country and if so, the details thereof, indicating names of all registered pesticides and the pests found resistant against each of these with levels of pesticide resistance?

THE DEPUTY PRIME MINISTER AND THE MINISTER OF AGRICULTURE (SHRI DEVI LAL):

Details of pests against which pesticide resistance has been reported in the country are as under

SI.	Pest No.	Pesticide	Level of Resistance
1	Singhara beetle	. DDT, BHC	Control failure
2	Tobacco caterpillar	BHC Malathion Pyrethrum Lindane Endosulfan	7 fold. 5. 7 fold. 14. 7. fold. 16. 3 fold. 85. 9 fold
3	Dinxmd back moth	. Fenitrothion Malathion DDT	Control failure
4	American bollwrom	. DDT Endosulfan Monocrotophos Cypermethrin Fenvalerate	70- 303 fold 12. 2- 12. 5 fold. 3. 6 fold. 19- 2510 fold 120- 287 fold.
5	Mustard aphid	. Endosulfan Malathion Dimetholate	13- 24 fold 4- 6 fold. 4- 6 fold.
6	Flour Beetle	. DDT Lindane Malathion	2. 3- 10 fold Resistant 16- 37. 8 fold.
7	Rice Weevil	. Malathion Lindane Phosphine	5. 8 fold. Resistant* Do.
8	Lesser Grain.... Borer	Malathion . Lindane Phosphine	Do. Do. Do.
9	Saw-toothed Grain-Beetle	Malathion	Do.
10	Khapra Beetle	Phosphine	40 fold.

Proclso level not determined.